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ABSTRACT

Vocational psychology researchers and practitioners are now attending to the issues of career success as an outcome of career adjustment. Previous research has focused on the stages of career development (Exploration, Establishment, Maintenance, and Decline). During the Establishment stage of career development, individuals usually establish a career, a way of life, a home, and a family. Mentoring has been linked with managerial and career success; mentoring is the sharing of tacit knowledge about how to master vocational development tasks of the career establishment stage. This study investigated the tacit knowledge of career experts (those who have successfully negotiated the systems in which they are currently working). Male career experts (N=50) were interviewed to elicit their tacit knowledge about the nature of work-related developmental tasks and skill knowledge about how to master these tasks. Fifteen personnel managers sorted and categorized the data. Regardless of occupation or level, most subjects reported on the importance of being able to work with others, of being results-oriented and managing tasks, of having a sense of self and of having the ability to motivate oneself to work. Most were managing their careers in terms of specific goals or at least were exploring options. Most of the workers had a keen conceptualization of their organization or field and had adapted to that system. (ABL)

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Tacit Knowledge of Career Experts in the Establishment Stage Related to Career Success in the Work Environment

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ABSTRACT

Tacit Knowledge of Career Experts in the Establishment Stage Related to Career Success in the Work Environment

This research paper discusses responses that lead to better adaptation to vocational development tasks that arise during the establishment stage of a career. Career experts were interviewed to extract their tacit knowledge about the nature of work-related developmental tasks and skill knowledge about how to master these tasks. Fifteen personnel managers sorted and categorized the data. A principal components analysis served to statistically extract the critical behaviors. The results on task mastery have career development implications for vocational psychology practitioners and career novices.

INTRODUCTION

Vocational psychology researchers and practitioners, having focused on career satisfaction over the past several years, are now attending to the issues of career success as an outcome of career adjustment (Lofquist & Dawis, 1984). Crites (1969) conceptualizes vocational success as "The probability that a worker's behavior will achieve a particular goal in a given work environment" (p. 414). Super et al. (1963) focus on the stages of career development (Exploration, Establishment, Maintenance, and Decline), and emphasize the importance of developmental tasks which individuals must master in order to achieve success at each stage.

Particularly interested in the Establishment stage which encompasses early adulthood, Crites (1976) asserts that the present and future career development of the young adult can be deterred or facilitated depending on how effectively the new worker handles the conditions or tasks of the job. Research (Crites, 1976) shows that counseling interventions and training related to success in work can increase the career maturity of attitudes and, therefore, can increase the effectiveness of completing the developmental tasks of the Establishment stage. However, according to Crites (1976), further theoretical work needs to be done on the identification of coping mechanisms in career adjustment.

Addressing this need, the premise of this current research is that successful individuals have implicit tacit knowledge about the nature of developmental tasks as they relate to work, and have skill knowledge about how to master these tasks. This legacy of knowledge is the tacit knowledge which mentors pass on to their proteges, the very knowledge which prepares individuals for success in the next stage of career development. By eliciting the tacit knowledge of career experts or mentors in the establishment stage of their careers, the innate career advancement and psychosocial knowledge can be made available to novices and minorities who do not have mentors. According to Super et al. (1957), success in attaining developmental tasks accounts for many of the differences in career and overall life development of individuals.

RATIONALE OF THE STUDY

During the Establishment stage of career development, from 25 to 45 years of age, individuals usually establish a career, a way of life, a home, and a family (Super, Crites, Hummell, Moser, Overstreet, & Warnath, 1957). Exploration has ceased, explains Super, et al. (1963), a commitment has been made, the individual is moving towards stabilization, and one's self-concept is likely to be that of a person settling down, making a place for oneself. As an apprentice, the career novice must deal with the issues of competence and performance potential, and is usually

dependent on others for learning, support, and guidance. Establishing oneself in a career, the individual is at the same time resisting the feelings of dependence in order to acquire a sense of competence (Baird & Kram, 1983). The major tasks of early adulthood, then, as described by Levinson and his colleagues (1978), are: forming a dream, forming an occupational identity, forming intimacy and forming a mentor relationship. From occupational entry to mid-career, then, the Establishment stage is the most critical stage in one's work life (Crites, 1982). For, one's performance during this stage usually determines the overall success or failure achieved in one's career (Hall & Schneider, 1973).

Regarding career development and advancement, mentoring has become a hot topic in academic and business circles during the past several years. Mentors are linked with managerial and career success, with the development of leaders as opposed to managers, as well as with socialization issues (Burke, 1984). The literature indicates that proteges usually benefit from the relationship with a mentor in terms of career development functions, psychosocial functions, and role model functions (Burke, 1984). Several major drawbacks to the mentoring relationship, however, cause this researcher to examine other means for acquiring these vocational development skills. First, not all managers can function effectively as

mentors, assuming a mentor needs to blend work commitment with being approachable, open, supportive, and helpful (Levinson, 1978). Secondly, females have more difficulty developing relationships with mentors. When they do develop these relationships, the experience appears to be similar to those involving males, however, personal and emotional dimensions are usually present (Burke, 1984). The mentoring relationships for women, then, are more complex and riskier than the relationships for men. Third, the benefits for mentors are limited (Burke, 1984). Levinson (1978) states that mentoring can meet a deep psychological need for individuals to contribute to another in a positive way. However, the mentoring relationship, involving a high level of contact, can require more time and effort than the successful professional is willing to give.

Based on Wagner & Sternberg's (1985) work on practical intelligence, mentoring is really the sharing of tacit knowledge about how to master the vocational development tasks of the career establishment stage. The basic idea of Wagner and Sternberg's approach to practical intelligence is that underlying real-world occupational success is tacit knowledge. This knowledge differs from academic knowledge in that it is never explicitly taught and often is never verbalized. Sternberg (1985) cites four kinds of tacit knowledge which are particularly important to real-world

occupational success in many fields. They are: Managing people, managing tasks, managing self, and managing career.

Though academic intelligence, creativity, and motivation are all relevant factors involved in professional success, tacit knowledge, according to Sternberg (1985) appears to be one important factor accounting for individual differences in real-world performance. "Interviews with successful business executives and academic psychologists revealed a striking level of agreement that a major factor underlying success in each occupation is a knowledge and understanding of the ins and outs of the occupation" (Sternberg, 1985). This knowledge, being practical rather than academic, informal rather than formal, and tacit rather than directly taught (Wagner & Sternberg, 1985) is the knowledge which mentors, as task experts and career strategists, pass on to their proteges.

By eliciting the tacit knowledge of career experts or mentors in the establishment stage of their careers, the innate career advancement and psychosocial knowledge can be made available to novices and minorities who do not have mentors. Offering valid coping mechanisms for mastering these vocational development tasks appears to be a viable alternative to the mentoring relationship. "Acquiring the tacit knowledge of those more experienced in our career pursuit may enable us to learn not only from our own

mistakes but from the mistakes of our predecessors as well" (Wagner & Sternberg, 1985, p. 455).

METHODOLOGY

To elicit tacit knowledge from career experts, a structured interview technique was used. The data was personal and subjective, however, by using the principal components analysis, the data could be objectively and statistically analyzed.

The sample consisted of 50 males in a variety of professions in northeastern Ohio who were career experts in the establishment stage of their careers. Operationally defined, career experts are individuals who have successfully negotiated the systems in which they are currently working. These individuals were nominated by their peers as being successful based on set criteria.

Roe's Two-Way Classification of Occupations (1956) served as a framework for building a heterogeneous group of participants drawn from a number of occupations and across all levels of organization (see attached). The subjects ranged from those having a high degree of job responsibility and skill (Level 1) to those having a low degree of job responsibility and skill (Level 6).

One hour audiotaped interviews were conducted with each participant by utilizing the critical incident interview technique. Based on the nomination criteria, those people who were selected for the interview would most likely be

utilizing tacit knowledge as part of their career development process. Each subject was asked six questions based on Crites' Career Adjustment and Development Inventory which measures individuals on six vocational development tasks of the establishment stage of career development. The tasks include: Organizational adaptability, position performance, work habits and attitudes, co-worker relationships, advancement, and career choice and plans. Crites (1982) determined that these tasks reflect relevant facets of the individual's career development and that those individuals who master these tasks are more successful and satisfied during the establishment stage of their work lives, that is, from occupational entry to mid-career.

DATA ANALYSIS

The critical incidents relating to the six developmental tasks were collected from 50 career experts. Each individual was asked about their behaviors regarding each developmental task. For example, the interviewer asked, "What was the most important thing that you did in terms of adjusting to your organization?" The response for the six questions was recorded and typed on separate index cards. Fifteen judges with expertise in the areas of personnel sorted the index cards into mutually exclusive categories on the basis of job-related skill behaviors. Each judge then assigned titles to the categories of behaviors relevant to accomplishing developmental tasks.

The judges' categories were pooled and charted. A principal component analysis was conducted for each of the six categories to extract a single list of hypothetical latent categories from the 15 groups of manifest categories independently used by the judges (Wiley, 1967).

A large matrix emerged. Therefore, the scree test (Cattell, 1966), was used to determine the effective number of large, substantive components accounting for most of the variance while minimizing the number of components. An additional program (Coovert & McNelis, 1988) was run to verify the number of common factors accounting for most of the variance. The item correlations with the rotated components were treated as latent category membership coefficients. Each latent category was named, and the coping behavior it defined was interpreted by examining the titles of the judges' manifest categories for each behavior that had a latent category membership coefficient exceeding .30.

Through this statistical process, the subjective tacit knowledge of the career experts about vocational development task mastery could be objectively categorized and explained. A list of coping behaviors used by men currently in the establishment stage of their careers emerged from this methodology.

RESULTS

The following results reflect the coping responses of fifty career experts, individuals who have mastered the jobs they are currently holding. Males from each of the five levels of organization, ranging from custodians to doctors and lawyers, and drawn from Roe's (1956) eight categories of occupations are represented in this sample. The ages of the subjects ranged from 25 years of age to 46 years of age, the mean age being 37, the median age being 38.5, and the mode being 43 years of age.

All of Roe's (1956) occupational categories were represented in this sample:

I.	Service	18%
II.	Business Contact	14%
III.	Organization	24%
IV.	Technology	10%
V.	Outdoor	8%
VI.	Science	6%
VII.	General Cultural	12%
VIII.	Arts and Entertainment	8%

As a result of the interviewing process, judging procedure, and statistical analysis, the following coping skills were extracted from the responses of the fifty career experts. Each major heading represents one of Crites' (1982) developmental tasks of the establishment stage of career development upon which the interview questions were based.

COPING BEHAVIORS OF THE ESTABLISHMENT STAGE

(The percentage of variance accounted for

is noted in parenthesis)

I. ORGANIZATIONAL ADAPTABILITY

-ESTABLISH INTERPERSONAL RELATIONSHIPS: be able to get along with others; be a team member (18%).

-DEMONSTRATE JOB KNOWLEDGE: work at keeping current in the field; maintain a high level of job knowledge (12.5%).

-PRACTICE COMMUNICATION SKILLS: be honest, direct and tactful with people (6%).

-DEVELOP A NETWORK: be open to learning from others, i.e., mentors, peers, subordinates and supervisors (6%).

-FOCUS ON THE BIG PICTURE: form a broad conceptualization of the organization (5%).

-FOLLOW THE NORMS: be willing to make personal changes in order to fit into the organization; practice self-discipline (4.5%).

-TAKE INITIATIVE: be responsible for completing tasks; "don't ask, just do it" (4%).

-ESTABLISH CREDIBILITY: be accountable; prove one's competence (4%).

II. POSITION PERFORMANCE

-ESTABLISH HIGH INTERNAL STANDARDS: be self-driving; administer tough self-evaluations (34%).

-FORMULATE TANGIBLE GOALS: be results-oriented (12%).

-SEEK EXTERNAL FEEDBACK: be open to the feedback from others including supervisors, peers, subordinates and clients (9%).

III. WORK HABITS AND ATTITUDES

-WELL-ORGANIZED: manage the environment; plan and prioritize (20%).

-STRONG WORK ETHIC: be a hard worker, committed, dedicated and take pride in the work (13%).

-PEOPLE-ORIENTED: listen and openly communicate with people; be sensitive to the needs of others (7%).

-TIME MANAGEMENT: work wisely and quickly; don't procrastinate; be early (work, meetings, due dates) (6%).

-JOB SATISFACTION: experience a sense of enjoyment from work (4.5%).

-COMPETENT: be responsible, knowledgeable, and results-oriented; maximize skills (4%).

IV. CO-WORKER RELATIONSHIPS

-EFFECTIVE LISTENING SKILLS: take the time to really listen to people (22%).

-ACCEPTING OF DIFFERENCES: show respect for each individual; accept people for who they are (13%).

-SENSITIVE TO OTHERS NEEDS: be willing to help people out; treat people fairly (7%).

-ESTABLISH RAPPORT: be willing to extend oneself to others; work at getting along with people (5%).

-INTERPERSONALLY ASTUTE: sensitive and intuitive in dealing with people; receptive to others (5%).

V. ADVANCEMENT

-PROFESSIONALLY INVOLVED: participates in career enhancing activities, i.e., education, training, seminars, selective conferences, professional reading, and public speaking (30%).

-INVOLVED IN NETWORKING: listens to and learns from others in the field including mentors, supervisors, peers, subordinates, and clients (12%).

-SEEKS CHALLENGES: is willing to take risks and assume additional responsibilities; thrives on change (10%).

VI. CAREER CHOICE AND PLANS

-HAS HIGH ASPIRATIONS: sets specific goals which are often accompanied by a timetable (26%).

-CHALLENGED IN CURRENT FIELD: feels satisfied by the level of stimulation and growth in one's chosen field (14%).

-CONSIDERING OPTIONS: has no definite plans but is exploring areas for potential growth (9%).

-ADVANCEMENT IN SAME ORGANIZATION: has plans to move up the steps of the organizational ladder (6%).

-FUTURE CHANGE: wants to try something different in one's job or career; some people see the change occurring before retirement and some people after retirement (5%).

Regardless of occupation or level, most subjects reported on the importance of being able to work with others, of being results-oriented and managing tasks, of having a sense of self and of having the ability to motivate oneself to work. Forty-seven of the fifty experts were managing their careers in terms of specific goals or at least were exploring options. Most of the workers had a keen conceptualization of their organization or field and had adapted to that system. These results clearly support Wagner & Sternberg's (1985) theory of tacit knowledge and the role it plays in acquiring real-world success. These subjects shared their implicit tacit knowledge about managing self, others, tasks and career during the interviews which resulted in a list of coping skills to master the developmental tasks.

In regards to mentoring, a few of the individuals reported having a mentor in their fathers who guided and coached them along, or in advisors who served as sponsors, teachers and advocates. Rather than mentoring, many of the respondents reported on the value of networking. Many of the respondents found it invaluable to tap the resources, such as job knowledge and experience, of many people, i.e., other professionals, co-workers, and clients. By

networking, the career experts felt in control of meeting specific needs rather than relying on the knowledge, skill and convenience of one person (a mentor).

Most of the men who were interviewed emphasized the importance of continual reading and effective writing as necessary coping skills in one's career. Though these skills did not emerge as major latent categories, they were laced through a number of the other groupings, such as communication skills, job knowledge and networking. One subject strongly encouraged new people to know how to write quickly and concisely if they wanted to advance in their careers.

One of the most inspiring interview sessions occurred with a grade school custodian whose avocation was art. He not only did an outstanding job of maintaining the school, keeping it clean and orderly, but he maximized his creative and artistic talents at work. Managing his time and resources, he painted a Winnie-The-Pooh mural in the girls lavatory and Batman in the boys room. In addition, as a tribute to the school, he sketched, matted, and framed pictures of the past principals of the school and hung them in the main hallway. To add a "flare" to the classrooms, he painted them two tones with one of the colors "flowing out the door." The gratification for him was in seeing the children's and teachers' pride in their school and their pleasure in the artwork. This individual was characteristic

of most of the men who were nominated as successful and were interviewed. These men were people-oriented, had high internal standards, had a strong work ethic, and maximized their skills.

DISCUSSION

These results have tremendous value to vocational counselors in terms of assisting career novices, women and minorities who feel at a disadvantage not having a mentor, as well as, individuals who have changed jobs or careers, and are again in the establishment stage. Individuals who are currently in the establishment stage but who feel dissatisfied and unsuccessful can also benefit from the tacit knowledge of the career experts. Organizations, striving for higher productivity and lower absenteeism, and for satisfied and successful employees, might reassess their training programs, career planning strategies and reward systems after reviewing these results.

In working with these populations, the vocational expert can facilitate growth by utilizing a systems framework or perspective which considers the individual, the interpersonal level and the organizational level of analysis (Kram, 1986). First, the newcomer needs to be clear about what it means to be in the establishment stage of career. Materials on the common issues, the developmental tasks, and the coping mechanisms of this stage would provide the individual with concrete information and would help one make

sense out of the discomforting feelings of "being new." By listening to the novice, the counselor can assess attitudes, personality and the specific personal and task needs of this person. In the session, the counselor would decide which developmental tasks are most salient to the client and point out the coping mechanisms which deal with "managing self."

At the interpersonal level, the counselor needs to assess the level of functioning of the individual's developmental relationships. During the establishment stage, individuals are usually seeking a sponsor, teacher and guide. Kram (1986) points out that a "life mentor" or "career mentor" can facilitate one's career but acquiring the ideal mentor is rare. The career experts in the present study more often networked or established alliances which changed in intensity as one's developmental needs changed. Some individuals are very comfortable in their relationships with people. Others might want to consider attending personal growth groups to learn how to interact on many levels.

At the organizational level, individuals should attend to the formal and informal norms of their organization. Using all available resources (behaviors and attitudes of people, formal and informal communications and seminars and training programs), one can learn about the organization. The novice must work to visualize the "big picture" and assess what one needs to become a part of the organization.

Some individuals do very well at all levels of the system, however, most people are most comfortable or are "naturals" at one of the levels. Practice, a variety of experiences, and skill development are necessary to be able to function well at all levels.

Organizations can help facilitate the assimilation and socialization process of the newcomer. Kram (1986) strongly discourages formal mentoring programs due to their known lack of success. However, she suggests that education and training programs tailored to the populations at different career stages and for women and minority groups could reap benefits in terms of career adjustment and development. A program for career experts to assess their readiness to provide mentoring to career novices might be effective. The list of coping skills, empirically derived from several career experts, could be used as a training tool. Formal education has limitations. However, if the materials are sound, the instructors are well-qualified and if the people attend voluntarily and are given the opportunity to self-explore, the training could impact the career development of many people.

CONCLUSION

In working towards career adjustment, one must learn to manage self, manage others, manage task and manage career. The extracted tacit knowledge about task mastery from career experts has the potential for assisting several career-

oriented individuals. Knowledge of one's current career stage, the developmental tasks of that stage, and the coping mechanisms to master the tasks can be invaluable tools to move one towards success and satisfaction in a given field.

ATTACHMENT

TWO-WAY CLASSIFICATION OF OCCUPATIONS*

Level	Group I. Service	II. Business Contact	III. Organization	IV. Technology	V. Outdoor	VI. Science	VII. General Cultural	VIII. Arts and Entertainment
1	Personal therapists. Social work supervisors. Counselors	Promoters	U. S. President & Cabinet Officers Industrial tycoons International bankers	Inventive geniuses Consulting or chief engineers, Ships' commanders	Consulting Specialists	Research scientists University,. college faculties Medical specialists Museum Curators	Supreme Court Justices University college faculties Prophets Scholars	Creative artists. Performers, great teachers, university equivalent Museum curators
2	Social worker Occupational therapists Probation, Truant officers (with training	Promoters Public relations counselors	C. P. A.s Business & government executives Union officials.	Applied scientists Factory managers Ships' Officers Engineers	Applied scientists Land owners and operators large Landscape architects	Scientists, Semi-independent Nurses Pharmacists Veterinarians	Editors Teachers, high school & elementary	Athlete Art critics designers Music arrangers
3	YMCA officials Detectives, police sergeants Welfare workers City inspectors	Salesmen; auto, bond, insurance, dealers, retail & wholesale Confidence men	Accountants, average Employment managers Owners, cattering, dry-cleaning, etc.	Aviators Contractors Foremen (DOT I) Radio Operators	County agent Farm owners Forest rangers Fish, game Wardens	Technicians medical, X-ray, museum Weather observers Chiropractor	Justices of the peace Radio announcers Reporters Librarians	Ad writers Designers Interior decorators Showmen
4	Barbers Chefs Practical nurses Policemen	Auctioneers Buyers(DOT) House canvassers	Cashiers Clerks Foremen, warehouse Salesclerks	Blacksmiths Electricians Foremen (DOT II) Mechanics	Laboratory testers, dairy products, etc. Miners	Technical assistants	Law clerks	Advertising artists Decorators,. window, etc. Photographers
5	Taxi drivers General houseworkers City firemen	Peddlers	Clerks, file, stock, etc. Notaries	Bulldozer operators Truck divers	Gardeners Farm tenants Teamsters	Vet. hospital attendants		Illustrators, greeting cards Showcard writers, Stage hands
6	Chambermaids Hospital attendants, Watchmen		Messenger	Helpers Laborers Wrappers Yardmen	Dairy hands Farm laborers, Lumberjacks	Non-technical helpers in scientific organization		

* Roe, Anne. Psychology of Occupations. New York: John Wiley, 1956, p. 151.

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